

Typhoid and Paratyphoid Fever

Description:

Typhoid and paratyphoid fever are diseases of the intestinal tract caused by the Salmonella Typhi and Salmonella Paratyphi bacteria. Typhoid is rare in developed countries. However, where environmental hygiene is poor, as in many developing countries, typhoid is a major public health problem. The greatest risk exists to travellers visiting countries where the disease is common. In Queensland, approximately ten cases of typhoid and five cases of paratyphoid fever are notified each year, most occurring in returned overseas travellers.

Symptoms:

The symptoms of typhoid fever may be mild or severe and may include prolonged fever, severe headache, constipation or diarrhoea, rose-coloured spots on the trunk and an enlarged spleen and liver. Most people usually recover fully over several weeks, although it can be fatal if untreated. Relapses are common and occur in up to 20% of cases.

The symptoms of paratyphoid fever are similar but tend to be milder.

The time from contact with the bacteria to the start of symptoms is usually 8-14 days for typhoid and 1-10 days for paratyphoid fever.

Transmission

Typhoid and paratyphoid fever are usually spread when faeces or urine from an infected person contaminates something that is transferred to another person's mouth. Contaminated water and food are the most common sources of infection. Flies may also spread the bacteria to food products.

A person is infectious for as long as the bacteria are present in the faeces or urine. This is usually from the first week of illness. With appropriate treatment, symptoms usually clear within a week, and very few people shed the bacteria in their faeces for a longer period. However, without treatment, about 10% of typhoid fever cases will be infectious for three months after becoming unwell, and 2-5% will permanently shed the bacteria in their faeces.

Control

If you have been diagnosed with typhoid or paratyphoid fever you should stay away from work or school as a minimum until you are well and have had no diarrhoea for 24 hours. If you handle food as part of your work, or if you care for patients or children or older people, it is important that you stay away from work until you are no longer shedding the bacteria in your faeces, unless you can do alternative lower risk duties. Children who are unable to maintain personal hygiene should stay away from school or child care until they have had negative faeces tests.

Anyone with diarrhoea should stay away from public swimming pools. If you have been diagnosed with typhoid or paratyphoid fever, it is important to continue to stay away from swimming pools until you have had negative faeces tests.

Public health authorities will help to arrange faeces testing so you will know when it is safe to return to higher risk activities.

If you have had close contact with someone who has typhoid or paratyphoid fever, you may also need faeces testing and to stay away from work, school or child care while awaiting the results. Public health authorities will advise if this is the case.

Good hygiene is the single most effective way of reducing spread of the disease, particularly effective hand washing. Hand washing is especially important after using the toilet and before preparing or handling food.

Treatment:

Antibiotics are usually used for the treatment of typhoid and paratyphoid fever.

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Prevention:

Because the bacteria are passed in the faeces and urine of infected people, good hygiene is the most effective way of preventing the spread of the disease. Hands should be washed thoroughly in soap and water for at least 15 seconds and then dried thoroughly. It is important to wash hands after going to the toilet, touching soiled linen or articles and before preparing or eating food.

Overseas travellers visiting high risk areas should avoid potentially contaminated water and food:

- Drink only bottled water (even when brushing teeth)
- Ask for drinks without ice and avoid iceblocks or popsicles that may have been made with contaminated water
- Eat food that has been thoroughly cooked and that is still hot and steaming
- Avoid raw vegetables and fruit that you cannot peel yourself
- Avoid food and drinks from street vendors.

Typhoid vaccination is recommended for all travellers two years of age and older going to endemic regions where food hygiene may be suboptimal and drinking water may not be adequately treated. Vaccination should be completed at least two weeks prior to travel.

Help and Assistance

For further information please contact your local doctor or nearest public health unit or the **13HEALTH** information line (13 43 25 84).

Other Resources

Immunise Australia website: <http://immunise.health.gov.au>

References

Heymann D, (Ed). 2008. *Control of Communicable Diseases Manual*, 19th Ed. Washington, DC: American Public Health Association.

National Health and Medical Research Council, 2008. *The Australian Immunisation Handbook* 9th Ed. Canberra: National Capital Printing.